heat flows (i.e., thermal gradients) across these components, with the center of the engine occupied by a mechanical system 3130. If 3130 were a fuel delivery system, this could serve to maintain liquid fuel under pressure at temperatures greater than boiling. A compressor/turbine system is indicated at 3129/3134.

IN THE CLAIMS

- 61. (Twice Amended) A device for the working of fluids comprising at least one cylinder assembly and a component reciprocatable therein, said component having two longitudinal extremities and at least one circumferential projection, said cylinder assembly having at least one internal circumferential depression in which [a] said projection is positioned to reciprocate, said projection and depression forming a pair of torroidal fluid working chambers of cyclically variable capacity, said component having at least one internal passage for movement of fluids to or from said working chambers, said assembly including a multiplicity of elements of ceramic material held in assembled and abutted condition by at least one fastener loaded in tension.
- 66. (Twice Amended) The device of claim 61, including a crankshaft [and a connecting rod,] to which crankshaft [an end of an extremity] at least one of said extremities is linked[, said connecting rod having a small and large end].
- 67. (Amended) The device of claim 61, including a device known as a scotch yoke to which an end of at least one of said [extension] extremities is linked.

75. (Amended) The device of claim 61, including means defining a volume for passage of fluids to or from said working chambers, said means substantially surrounding [at least a portion of] said cylinder assembly.

[housing] structure, at least one cylinder assembly having a circumferential depression and directly mounted in said [housing] structure and a component reciprocatable in said assembly, said component having two open cylindrical ends and at least one circumferential projection reciprocatable in said circumferential depression in said assembly to form at least one pair of torroidal fluid working chambers of cyclically variable capacity, said component having at least one internal volume for passage of fluids to said working chambers, said [housing being substantially of] structure including insulating material to restrict heat transfer from said assembly.

a cylinder assembly mounted in said structure, a component reciprocatable within said assembly, filamentary material, said component having at least one longitudinal extremity and at least one circumferential projection, said cylinder assembly having at least one circumferential depression in which said projection is positioned to reciprocate, said projection and depression defining a pair of torroidal fluid working chambers of cyclically variable capacity and means defining a volume for passage of fluids to or from said working chambers, said means being substantially located within said structure [surrounding at least a

portion of said cylinder assembly], said volume containing said filamentary material.

121. (Amended) The device of claim 118, [including a housing,] wherein said [housing is of] structure at least partly comprises insulating material [and at least partly surrounds said cylinder assembly].

known as a scotch yoke having at least one elongate slot, at least two crank and crank-pin assemblies, a cylinder assembly and a component reciprocatable within said assembly, said component having at least one longitudinal extremity and at least one circumferential projection, said cylinder assembly having at least one circumferential depression in which said projection is positioned to reciprocate, said projection and depression forming a pair of torroidal fluid working chambers of cyclically variable capacity, said component having at least one internal passage for movement of fluids to and from said working chambers and being linked mechanically to said scotch yoke, said crank assemblies being linked to at least one of said slots and are coaxial and contra rotatable [being mechanically linked to said scotch yoke].